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Lucanus victorius n. sp., a new outstanding stag beetle from Sichuan, China (Coleoptera, Lucanidae)

Abstract - A new species, *Lucanus victorius*, is described. It belongs to the *L. lunifer* group and is related to *L. gennestrieri* and *L. pseudosingularis*, from which it differs through the slender mandibles, neither dilated nor serrated at the base; through the strongly divergent fork of the well developed clypeal apophysis and through the transverse, concave and medially weakly depressed frontal ridge.

Key words: Lucanidae, *Lucanus*, new species, Sichuan, China.

Riassunto - *Lucanus victorius* n. sp., una nuova straordinaria specie di cervo volante, proveniente dallo Shaanxi, Cina (Coleoptera, Lucanidae).

La nuova specie *Lucanus victorius*, qui descritta, appartiene al gruppo del *L. lunifer* ed è vicina al *L. gennestrieri* e al *L. pseudosingularis*, dai quali differisce per la forma generale delle mandibole, slanciate, non dilatate e prive di denticoli alla base, per l'apofisi clipeale molto sviluppata con forca apicale fortemente divergente, e per la cresta frontale che è concava, leggermente depressa al centro.

Parole chiave: Lucanidae, *Lucanus*, nuova specie, Sichuan, Cina.

Introduction

The possibility raised during the last years to visit, for entomological aims, areas previously definitely unapproachable, when not absolutely interdicted to foreigners, lead to the discovery of some extraordinary species of Lucanidae, especially in South Eastern Asian areas.

A careful examination of the material collected by my Japanese colleague Kiyotami Fukinuki during his entomological expedition on the Daxue Shan Mountains of Sichuan, along the oriental border with Tibet state, allowed the identification of a very interesting new specie of *Lucanus* Scop. belonging to the group of *Lucanus lunifer* Hope 1833. This new species is hereby figured and described as *Lucanus victorius*.

Lucanus victorius n. sp.

Holotype. Male: China, Sichuan, Daxue Shan mts, Yinjing, V-VI.2002. Deposited in the collections of the Museo Civico di Storia Naturale di Milano, Italy (MSNM).

Paratypes. 8 males, 1 female: same data as the Holotype, deposited in the following private collections: K. Fukinuki, Hiroshima, Japan (5 males, 1 female); N. Okuda, Osaka, Japan (1 male); M. Suzumura, Kobe, Japan (1 male) and in the author's collection (1 male).

Measurements (data of the Holotype are reported between parentheses): Length, including mandibles: 46,7-66,5 mm (56,6 mm). Length without mandibles: 36-50 mm (43,1 mm). Maximum head width, excluding mandibles: 12-17,6 mm (14,1 mm).

Description (Holotype). Body slender, black, abdominal sternites reddish brown, with posterior and lateral margins black; elytra dark reddish brown in the middle, darkening to black to sides and suture, and looking also somewhat feebly metallic; antennae and palpi black; legs mostly black with a more or less evident reddish brown tinge, especially on femora. Body covered by a long, appressed, golden pubescence, which makes the specimen shine like pyrite. The pubescence is slightly sparser along the elytral 'costae' (see below), giving to the elytra a somewhat striped look. Mandible long and slender feebly and regularly curved from base to apex, finely sculptured, pubescent and matt proximally, sparsely punctured and slightly shining distally. Median tooth small, conical, placed at the distal one third of the inner margin of the mandible, and with a similar but smaller preapical denticle. Upper apical tooth slightly bent upwards, longer than the lower one. Lower tooth of the mandibular base very small, conical, placed along the outer edge of the mandible. Head, excluding the clypeal apophysis, transverse (W/L: 2,03), finely and irregularly sculptured throughout, matt. Frons trapezoidal, convex in the middle, deeply depressed at sides; transverse frontal ridge concave, rather straight in the middle, weakly depressed medially; clypeal crest strongly produced anteriorly into a long and apically forked apophysis; epistoma triangular. Lateral cephalic ridges weakly sinuate behind the anterior angles, with posterior angles narrowly rounded. Anterior angles strongly projecting laterally beyond the level of prominent eyes, with canthus penetrating less than half the diameter of the eye. Mentum strongly concave with raised basal margin, bent upwards at sides and downwards at apex, with strongly sculptured surface, covered with sparse yellowish hairs. Antennal club formed by joints 7-10. Prothorax transverse (W/L: 1,73), finely and irregularly sculptured, matt, with wide and very shallow, longitudinal medial depression; posterior angles feebly protruding. Prosternum weakly prominent and widely rounded, covered with long yellowish hairs. Scutellum transverse, widely rounded posteriorly, punctulate and very finely micro-reticulated; its posterior margin translucid. Elytron slender, finely and densely punctured and superficially micro-reticulated, rather shining, with a long and very shallow longitudinal depression and a stronger but shorter sublateral one abruptly beginning anteriorly to the midlength and ending before apex. The areas between such depressions look like low and wide longitudinal costae; shoulders toothed. Legs slender, finely sculptured, matt and covered with short yellowish hairs, shorter on fore tibiae. Fore and mid tibiae irregularly toothed on its external edge, hind tibiae with

four (the basal two smaller and the apical two larger) spines. Aedeagus (Fig. 1): flagellum very developed, triangularly widened at its apex; middle lobe robust, as long as parameres. Gonosomite (Fig. 2) with 'spiculum gastrale' gradually widening from base to the strongly dilated apex.

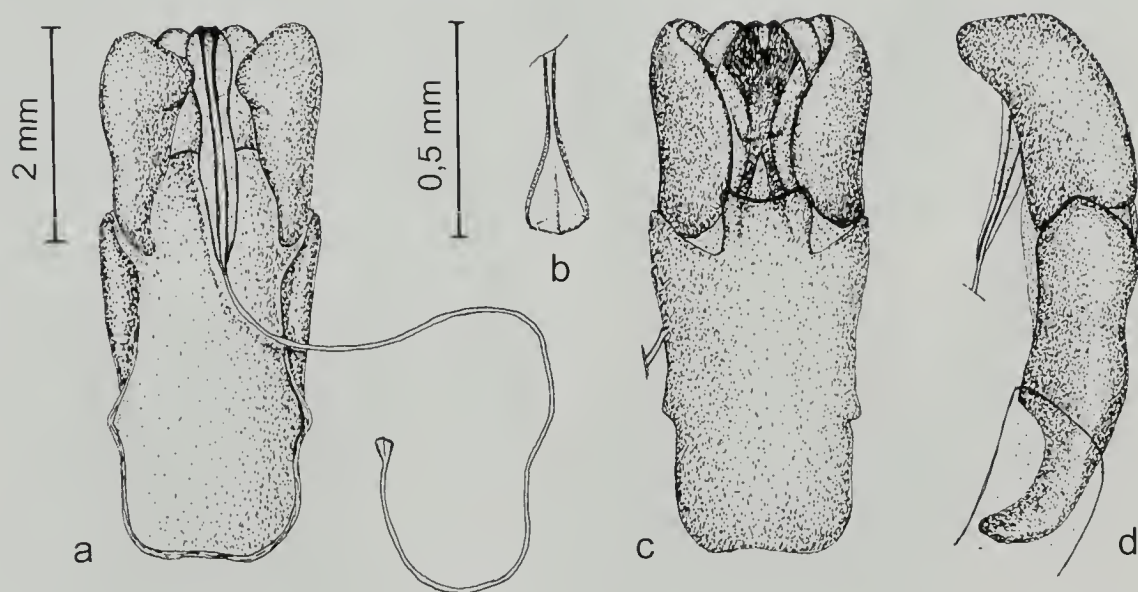


Fig. 1 - Aedeagus; a) dorsal view, b) apex of flagellum, c) ventral view, d) lateral view.
Fig. 1 - Edeago; a) visione dorsale, b) apice del flagello, c) visione ventrale, d) visione laterale.

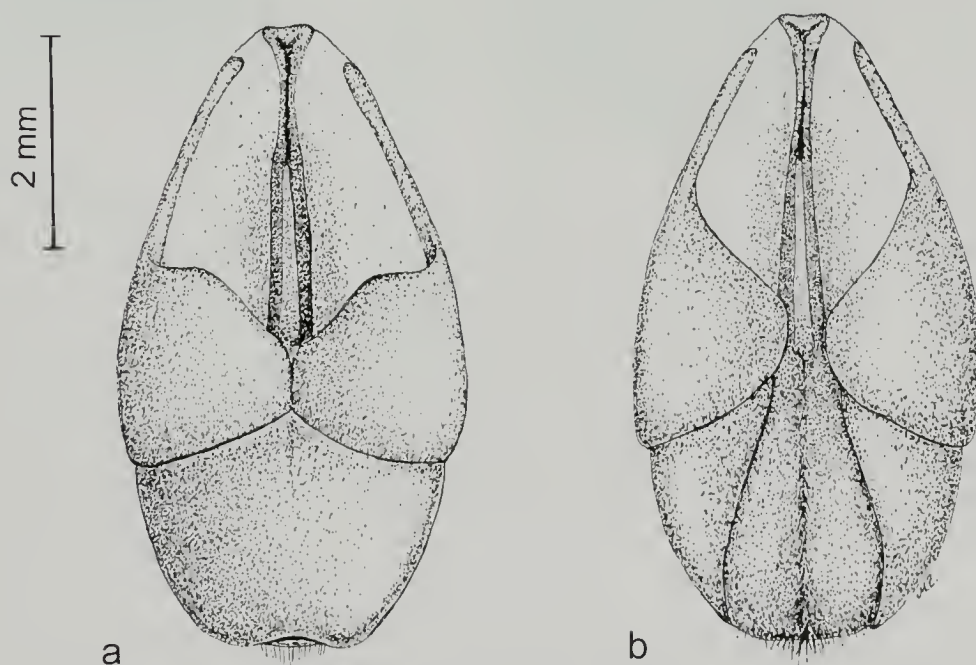


Fig. 2 - Gonosomite; a) dorsal view, b) ventral view.
Fig. 2 - Gonosomite; a) visione dorsale, b) visione ventrale.



Fig. 3 - *Lucanus victorius* n. sp. Male, holotype. (MNSM). Female, paratype (coll. Fukinuki).

Fig. 3 - *Lucanus victorius* n. sp. Maschio, olotipo. (MNSM). Femmina, paratipo (coll. Fukinuki).

Paratypes. Consistent with the holotype's description. The mandibles of some specimens bear few small denticles, just before the submedian tooth. Larger specimens have the median tooth of the mandibles and the basal tooth of the mandibular apex stronger.

Female

Measurements. Length, including mandibles: 28,5 mm. Length, without mandibles: 25,4 mm. Maximum head width: 7,8 mm. Consistent with the other females of the *L. lunifer* group, however it can be distinguished through the following features.

Lateral ridges of the head well developed.

Elytra with the same longitudinal depressions already seen in the male.

Derivatio nominis. A noun in apposition. This species is dedicated to my father Vittorio, who always supports me together with my “unusual” passion for beetles.

Remarks

This interesting new species is related to *L. gennestrieri* Lacroix, 1971 and *L. pseudosingularis* Didier & Seguy, 1953, of the group of *L. lunifer* Hope, 1833, but it can however be easily distinguished at glance from any other species of its group through the peculiar shape of the male mandibles, which are slender, not proximally dilated, and completely devoid of small teeth at the base, through the concave and feebly depressed transverse frontal ridge and through the strongly developed and divergent branches of the clypeal apophysis.

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